IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	Charlie Wen-Tsann Chen
Serial No.:	09/728,205
Filed:	December 1, 2000
For:	SYSTEM FOR ALLOCATING RESOURCES IN A PROCESS SYSTEM AND METHOD OF OPERATING THE SAME
Group No.:	2194
Examiner:	Diem K. Cao

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

APPEAL BRIEF

Appellant hereby files its Appeal Brief to the Board of Patent Appeals and Interferences ("Board") appealing a decision of the Primary Examiner dated February 6, 2006 that finally rejected Claims 1-20. The Appellant timely filed a Notice of Appeal on June 6, 2006 (with a one month extension of time) that was received by the Patent and Trademark Office on June 9, 2006. A three month extension of time is filed with this Appeal Brief to extend the due date of the Appeal Brief to December 9, 2006.

REAL PARTY IN INTEREST

This application is currently owned by Dallas/Fort Worth Technology, Inc. as indicated by an assignment recorded on March 23, 2001 in the Assignment Records of the United States Patent and Trademark Office at Reel 011653, Frame 0865.

RELATED APPEALS AND INTERFERENCES

There are no known appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in this pending appeal.

STATUS OF CLAIMS

Claims 1-20 are pending in the above-identified patent application. Claims 1, 6-7, 11, 13 and 18-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over by U. S. Patent No. 5,408,663 to Harold R. Miller ("*Miller*") in view of U.S. Patent No. 6,360,263 to Kurtzberg et al. ("*Kurtzberg*"). Claims 2-3, 8, 12 and 14-15 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Miller* in view of *Kurtzberg* and further in view of U. S. Patent No. 5,212,791 to Damian et al. ("*Damian*"). Claims 4 and 16 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Miller* in view of *Kurtzberg* and further in view of U. S. Patent No. 6,732,140 to Kevin C. McCue ("*McCue*"). Claims 5, 9-10 and 17 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Miller* in view of *Kurtzberg* and *McCue* and further in view of Damian. Claims 1-20 are shown in Appendix A.

STATUS OF AMENDMENTS

No amendments were submitted and refused entry after issuance of the final Office Action dated February 6, 2006.

SUMMARY OF CLAIMED SUBJECT MATTER

The present invention comprises a system 100 and methods of operating the system 100 for allocating a plurality of resources 115, both process resources and human resources, among a plurality of tasks 120 within the process system 100. A resource allocator 110 of the process system 100 allocates a plurality of the resources 115 among a plurality of the tasks 120 within the process system 100, wherein the plurality of resources 115 includes both human resources and process resources, and wherein the process system 100 includes a plurality of application processes 105. (Specification, Page 5, Line 19 to Page 6, Line 3; Page 11, Line 12 to Page 12, Line 19).

The resource allocator 110 comprises a memory 125, a status monitoring controller 130, and a resource allocation controller 135. The memory 125of the resource allocator 110 stores a model 145 of the process system 100. The model 145 represents mathematically the plurality of application processes 105, the plurality of resources 115, and the plurality of tasks 120. In addition, the memory 125 of the resource allocator 110 defines various relationships among the application processes 105, the plurality of resources 115, and the plurality of tasks 120. (Specification, Page 12, Line 19 to Page 13, Line 16).

The status monitoring controller 130 of the invention monitors measurable characteristics associated with the process system 100, the application processes 105, the resources 115, and the tasks 120. In response to the monitored measurable characteristics, the resource allocation controller 135 is operable to (1) modify ones of the mathematical representations of the various elements and (2) allocate ones of the resources 115 among ones of the tasks 120 within the process system 110. (Specification, Page 13, Line 17 to Page14, Line16).

Regarding Claim 1, a resource allocator 110 of the invention is claimed that is operable to allocate a plurality of tasks 120 within in a process system 100 wherein the plurality of resources comprise both human resources and process resources and wherein the process system 100 comprises a plurality of application processes 105. The resource allocator 110 comprises:

(1) a memory 125 that stores a model 145 of the process system 100. The model represents mathematically the plurality of application processes 105, and the plurality of resources 115, and the plurality of tasks 120 and defines relationships between the various elements thereof; and

(2) a status monitoring controller 130 that monitors measurable characteristics associated with ones of the process system 100, the plurality of application processes 105, the plurality of resources 115, and the plurality of task 120s; and

(3) a resource allocation controller 135 that modifies ones of the mathematical representations and that allocates ones of the plurality of resources 115 among ones of the plurality of tasks 120 with the process system 100 in response to ones of the

monitored measurable characteristics. (Specification, Claim 1, Page 31, Lines 1-18).

Regarding Claim 7, a method of operating a resource allocator 110 in a process system 100 is claimed that comprises the steps of: (1) storing a model 145 of the process system 100 in a memory 125 within the resource allocator 110, wherein the memory represents mathematically a plurality of application processes 105, a plurality of resources 115, a plurality of tasks 120, and defining relationships among the related ones thereof, and (2) monitoring measurable characteristics associated with ones of the process system 100, the plurality of application processes 105, the plurality of resources 115, and the plurality of tasks 120 in the memory 125, and (3) modifying ones of the mathematical representations and allocating ones of the plurality of resources 115 among ones of the plurality of tasks 120 within the process system 100 in response to ones of the monitored measurable characteristics. (Specification, Claim 7, Page 33, Lines 1-18).

Regarding Claim 13, a process system 100 is claimed that comprises a plurality of subsystems, a plurality of tasks, a plurality of resources (including both human resources and process resources), and a resource allocator 110. The resource allocator 110 comprises (1) a memory 125 that stores a model 145 of the process system 100. The model represents mathematically the plurality of application processes 105, and the plurality of resources 115, and the plurality of tasks 120 and defines relationships between the various elements thereof; and (2) a status monitoring controller 130 that monitors measurable characteristics associated with ones of the process system 100, the plurality of application processes 105, the plurality of resources 115, and the plurality of tasks 120; and (3) a resource allocation controller 135 that modifies ones of the

mathematical representations and that allocates ones of the plurality of resources 115 among ones of the plurality of tasks 120 with the process system 100 in response to ones of the monitored measurable characteristics. (Specification, Claim 13, Page 36, Lines 1-22).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Claims 1, 6-7, 11, 13 and 18-20 stand rejected under 35 U.S.C. § 103(a) over as being unpatentable over by U. S. Patent No. 5,408,663 to Harold R. Miller ("*Miller*") in view of U.S. Patent No. 6,360,263 to Kurtzberg et al. ("*Kurtzberg*").

2. Claims 2-3, 8, 12 and 14-15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Miller* in view of *Kurtzberg* and further in view of U. S. Patent No. 5,212,791 to Damian et al. ("*Damian*").

3. Claims 4 and 16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Miller* in view of *Kurtzberg* and further in view of U. S. Patent No. 6,732,140 to Kevin C. McCue ("*McCue*").

4. Claims 5, 9-10 and 17 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Miller* in view of *Kurtzberg* and *McCue* and further in view of *Damian*.

ARGUMENT

The rejections of Claims 1, 6-7, 11, 13 and 18-20 under 35 U.S.C. § 103(a) are improper and should be withdrawn. The rejections of Claims 2-3, 8, 12 and 14-15 under 35 U.S.C. § 103(a) are improper and should be withdrawn. The rejections of Claims 4 and 16 under 35 U.S.C. § 103(a) are improper and should be withdrawn. The rejections of Claims 5, 9-10 and 17 under 35 U.S.C. § 103(a) are improper and should be withdrawn.

A. STANDARD FOR OBVIOUSNESS REJECTIONS

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. MPEP § 2142; *In re Fritch*, 972 F.2d 1260, 1262, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992). The initial burden of establishing a *prima facie* basis to deny patentability of a claimed invention is always upon the Patent Office. MPEP § 2142; *In re Oetiker,* 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 USPQ 870, 873 (Fed. Cir. 1985).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. MPEP § 2142.

In order to establish obviousness by combining references there must be some teaching or suggestion in the prior art to combine the references. *Arkie Lures, Inc. v. Gene Larew Tackle, Inc.*, 119 F.3d 953, 957, 43 USPQ2d 1294, 1297 (Fed.Cir. 1997) ("It is insufficient to establish obviousness that the separate elements of an invention existed in the prior art, absent some teaching or suggestion, in the prior art, to combine the references."); *In re Rouffet*, 149 F.3d 1350, 1355-56, 47 USPQ2d 1453, 1456 (Fed.Cir. 1998) ("When a rejection depends on a combination of prior art references, there must be some teaching, or motivation to combine the references.")

Evidence of a motivation to combine prior art references must be clear and particular if the trap of "hindsight" is to be avoided. *In re Dembiczak*, 175 F.3d 994, 50 USPQ2d 1614 (Fed.Cir. 1999) (Evidence of a suggestion, teaching or motivation to combine prior art references

must be "clear and particular." "Broad conclusory statements regarding the teaching of multiple references, standing alone, are not 'evidence.'"). *In re Roufett*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457 (Fed.Cir. 1998) ("[R]ejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be 'an illogical and inappropriate process by which to determine patentability.'")

B. REJECTIONS OF CLAIMS 1-20

Claims 1-20 have been rejected under 35 U.S.C. §103(a) as being unpatentable for obviousness in view of the *Miller* reference and the *Kurtzberg* reference and the *Damian* reference and the *McCue* reference. The Appellant directs the Board's attention to Claim 1, which contains the unique and non-obvious limitations emphasized below:

> 1. A resource allocator that is operable to allocate a plurality of resources among a plurality of tasks within a process system, said plurality of resources comprising human resources and process resources, and said process system comprising a plurality of application processes, said resource allocator comprising:
>
> a memory that stores a model of said process system, said model representing mathematically said plurality of application processes, said plurality of resources, and said plurality of tasks, and defining relationships among related ones thereof;
>
> a status monitoring controller that monitors measurable characteristics associated with ones of said process system, said plurality of application processes, said plurality of resources, and said plurality of tasks; and
>
> a resource allocation controller that modifies ones of said mathematical representations and that allocates ones of said plurality of resources among ones of said plurality of tasks within said process system in response to ones of said monitored measurable characteristics. (Emphasis added).

Independent Claims 7 and 13 recite analogous limitations. The Appellant respectfully submits that the *Miller*, *Kurtzberg*, *Damian* or *McCue* references, individually or in combination, do not disclose, suggest, or even hint at the above-emphasized limitations of Claims 1, 7 and 13.

In rejecting independent Claims 1, 7 and 13, the Examiner asserted that the description in the *Miller* reference of "tasks constituting a project" teaches the Appellant's recited limitation of a process system comprising a plurality of application processes. Initially, the Appellant notes that the *Miller* reference describes a system that allocates resources to tasks in a single project, not a plurality of projects. Furthermore, the Appellant respectfully submits that the Examiner has misunderstood the language of the claims.

Application processes 105 and tasks 120 are separately recited elements of the Appellant's invention. There are tasks 120 within the recited process system 100, but the process system 100 also comprises application processes 105. As recited, the model 145 of the process system 100 stored in memory 125 of the Appellant's invention represents application processes 105 and tasks 120 separately. The recited status monitoring controller 130 monitors separate measurable characteristics of application processes 105 and tasks 120. In short, the application processes 105 are not the aggregate of the tasks 120, as asserted in the rejection.

The four cited references (*Miller*, *Kurtzberg*, *Damian* and *McCue*) do not disclose, suggest, or even hint at this limitation of the independent Claims 1, 7 and 13. All of the prior art references are concerned with the more limited problems of allocating project resources to tasks (*Miller*), allocating computing resources to jobs (*Kurtzberg*), allocating production resources to orders

(*Damian*), and allocating software resources to functions (*McCue*). None of the cited references describes a resource allocator for a process system comprising application processes in which the resource allocator models resources, tasks and application processes, and monitors measurable characteristics of the resources, tasks and application processes in order to allocate the resources to the tasks, as recited in independent Claims 1, 7 and 13. This being the case, Claims 1, 7 and 13 are patentable over the *Miller*, *Kurtzberg*, *Damian* and *McCue* references.

Also, dependent Claims 2-6, 8-12 and 14-20 depend from independent Claims 1, 7 and 13, directly or indirectly, and contain all of the unique and non-obvious limitations recited in the base claims. As such, Claims 2-6, 8-12 and 14-20 also are patentable over the *Miller*, *Kurtzberg*, *Damian* and *McCue* references. Thus, the Appellant respectfully requests the withdrawal of the §103 rejections of Claims 1-20.

C. REJECTIONS OF CLAIMS 1, 6-7, 11, 13 AND 18-20

Claims 1, 6-7, 11, 13 and 18-20 have been rejected under 35 U.S.C. §103(a) as being unpatentable for obviousness in view of the *Miller* reference and the *Kurtzberg* reference. For the reasons set forth below, the Appellant respectfully submits that the Examiner has not established a *prima facie* case of obviousness with respect to Claims 1, 6-7, 11, 13 and 18-20.

The Appellant hereby reiterates and incorporates by reference all of the arguments previously set forth with respect to the *Miller* reference and the *Kurtzberg* reference and the *Damian* reference and the *McCue* reference.

The Appellant notes that the Miller reference describes a system that allocates resources to a single project and not to a plurality of projects. The Appellant respectfully traverses the Examiner's assertion that the *Miller* reference teaches a resource allocator that comprises a "process system comprising a plurality of application processes (tasks constituting a project; col. 2, lines 45-46). (February 6, 2006 Office Action, Page 2, Line 18-19). The Appellant respectfully traverses the Examiner's conclusion that the mention in the *Miller* reference of "tasks constituting a project" teaches the Appellant's recited limitation of a process system that comprises a plurality of application processes. There is no mention in the *Miller* reference of a plurality of application processes.

The Examiner stated that "However, Miller does not explicitly teach the resource allocator comprising a status monitoring controller and a resource allocation controller. Kurtzberg teaches the resource allocator comprising a status monitoring controller (col. 1, lines 37-45) and a resource allocation controller (col. 1, lines 46-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Miller and Kurtzberg because the system of Kurtzberg provides a method suitable for optimizing allocation of resources in a multi-processor time-shared computer system." (February 6, 2006 Office Action, Page 3, Paragraphs 5-6).

The Appellant respectfully traverses the Examiner's assertion that the *Kurtzberg* reference teaches a resource allocator that comprises a status monitoring controller and a resource allocation controller of the type disclosed and claimed by the Appellant. The specification of the Appellant's patent application states: "Exemplary status monitoring controller 130 is operable to monitor

measurable characteristics associated with ones of process system 100, application processes 105, resources 115, and tasks 120." (Specification, Page 13, Lines 17-20) (Emphasis added). The *Kurtzberg* reference describes the allocation of computer resources to computer jobs. The *Kurtzberg* reference does not describe a "process system" as that term is used by the Appellant. (Specification, Page 11, Line 22 to Page 12, Line 6). The *Kurtzberg* reference does not describe monitoring the measurable characteristics of application processes as the term "application process" is used by the Appellant. The term "application process" is an executable program that is designed for or meets the needs of a "process system" as that term is used by the Appellant. (Specification, Page 11, Lines 12-22). The *Kurtzberg* reference is silent concerning these concepts. The problem addressed by Kurtzberg is how to optimally allocate computer resources among a plurality of computer users. (Kurtzberg, Column 1, Lines 26-29).

The Appellant also respectfully traverses the Examiner's assertion that it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device as taught by *Miller* with the teachings of the *Kurtzberg* reference. Specifically, the Appellant traverses the Examiner's assertions that "It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Miller and Kurtzberg because the system of Kurtzberg provides a method suitable for optimizing allocation of resources in a multi-processor time-shared computer system."

The supposed motivation to "optimize" an "allocation of resources" is very general and does not specifically suggest combining the teachings of the *Kurtzberg* reference with the teachings of the

Miller reference. There must be some suggestion or motivation, either in the references themselves, or in the knowledge generally available to one of ordinary skill in the art, to modify a reference or to combine reference teachings. The desire to "optimize" is too general and vague to provide the requisite motivation to modify a reference or to combine reference teachings. As previously noted, neither the *Miller* reference nor the *Kurtzberg* reference discloses the concept of a resource allocator that allocates resources within a process system that comprises a plurality of application processes. Furthermore, there is no suggestion or motivation to combine the teachings of the *Miller* reference with the teachings of the *Kurtzberg* reference.

The supposed motivation to "optimize" an "allocation of resources" does not specifically suggest combining the teachings of the *Miller* reference with the teachings of the *Kurtzberg* reference. The fact that two references are concerned with the same general technical area does not without more provide a "clear and particular" motivation to combine the references. The Appellant respectfully submits that the alleged motivation to combine references has been assumed by "hindsight" in light of the existence of the Appellant's invention. There is no "clear and particular" motivation (as required by the applicable law) to combine the concept as disclosed by *Miller* with the teachings of the *Kurtzberg* reference.

Even if the *Miller* reference could somehow be combined with the *Kurtzberg* reference, the combination would not teach, suggest, or even hint at the Appellant's invention as set forth in Claims 1, 6-7, 11, 13 and 18-20. MPEP § 2142 indicates that a prior art reference (or references when two or more references are combined) must teach or suggest all the claim limitations of the

invention. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not be based on an Appellant's disclosure. In the present case, the *Miller* reference and the *Kurtzberg* reference in combination would not teach or suggest all the claim limitations of the Appellant's invention.

Also, dependent Claims 2-6, 8-12 and 14-20 depend from independent Claims 1, 7 and 13, directly or indirectly, and contain all of the unique and non-obvious limitations recited in the base claims. As such, Claims 2-6, 8-12 and 14-20 also are patentable over the *Miller* reference and the *Kurtzberg* reference, whether taken singly or in combination. Thus, the Appellant respectfully requests the withdrawal of the §103 rejections of Claims 1-20.

D. REJECTIONS OF CLAIMS 2-3, 8, 12 AND 14-15

Claims 2-3, 8, 12 and 14-15 have been rejected under 35 U.S.C. §103(a) as being unpatentable for obviousness in view of the *Miller* reference and the *Kurtzberg* reference and the *Damian* reference. For the reasons set forth below, the Appellant respectfully submits that the Examiner has not established a *prima facie* case of obviousness with respect to Claims 2-3, 8, 12 and 14-15.

The Appellant hereby reiterates and incorporates by reference all of the arguments previously set forth with respect to the *Miller* reference and the *Kurtzberg* reference and the *Damian* reference and the *McCue* reference.

The Appellant respectfully traverses the Examiner's assertion that it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the combination of the *Miller* reference and the *Kurtzberg* reference with the graphical user interface of the *Damian* reference. Specifically, the Appellant traverses the Examiner's assertions that "It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Miller, Kurtzberg and Damian because it allows interactive monitoring and adjustment of the schedule by an operator (abstract)." (February 6, 2006 Office Action, Page 5, Lines 4-7).

The Appellant respectfully submits that the *Damian* reference does not and can not supply the deficiencies of the *Miller* and *Kurtzberg* references with respect to the Appellant's claimed invention. The *Damian* reference is concerned with allocating production resources to orders. Therefore, the *Damian* reference does not teach a resource allocator of the types disclosed and claimed by the Appellant.

There is no specific suggestion to combine the teachings of the *Damian* reference with the teachings of the *Miller* reference or the *Kurtzberg* reference. There must be some suggestion or motivation, either in the references themselves, or in the knowledge generally available to one of ordinary skill in the art, to modify a reference or to combine reference teachings. There is no suggestion or motivation to combine the teachings of the *Damian* reference with the teachings of the *Miller* reference or the *Kurtzberg* reference.

The fact that two references are concerned with the same general technical area does not without more provide a "clear and particular" motivation to combine the references. The Appellant respectfully submits that the alleged motivation to combine references has been assumed by "hindsight" in light of the existence of the Appellant's invention. There is no "clear and particular" motivation (as required by the applicable law) to combine the teachings of the *Damian* reference with the teachings of the *Miller* reference or the *Kurtzberg* reference.

Even if the *Damian* reference could somehow be combined with the *Miller* reference and the *Kurtzberg* reference, the combination would not teach, suggest, or even hint at the Appellant's invention. MPEP § 2142 indicates that a prior art reference (or references when two or more references are combined) must teach or suggest all the claim limitations of the invention. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not be based on an Appellant's disclosure. In the present case, the *Damian* reference and the *Miller* reference and the *Kurtzberg* reference in combination would not teach or suggest all the claim limitations of the Appellant's invention.

As such, Claims 2-3, 8, 12 and 14-15 also are patentable over the *Miller* reference and the *Kurtzberg* reference and the *Damian* reference, whether taken singly or in combination.

E. REJECTIONS OF CLAIMS 4 AND 16

Claims 4 and 16 have been rejected under 35 U.S.C. §103(a) as being unpatentable for obviousness in view of the *Miller* reference and the *Kurtzberg* reference and the *McCue* reference. For the reasons set forth below, the Appellant respectfully submits that the Examiner has not established a *prima facie* case of obviousness with respect to Claims 4 and 16.

The Appellant hereby reiterates and incorporates by reference all of the arguments previously set forth with respect to the *Miller* reference and the *Kurtzberg* reference and the *Damian* reference and the *McCue* reference.

The Appellant respectfully traverses the Examiner's assertion that it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the combination of the *Miller* reference and the *Kurtzberg* reference with the resource database of the *McCue* reference. Specifically, the Appellant traverses the Examiner's assertions that "It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Miller, Kurtzberg and McCue because it provides a method to manage the resources more effectively by using the known-knowledge in the database art." (February 6, 2006 Office Action, Page 6, Lines 8-11).

The Appellant respectfully submits that the *McCue* reference does not and can not supply the deficiencies of the *Miller* and *Kurtzberg* references with respect to the Appellant's claimed invention. The *McCue* reference is concerned with allocating software resources to functions. Therefore, the *McCue* reference does not teach a resource allocator of the types disclosed and

claimed by the Appellant.

There is no specific suggestion to combine the teachings of the *McCue* reference with the teachings of the *Miller* reference or the *Kurtzberg* reference. There must be some suggestion or motivation, either in the references themselves, or in the knowledge generally available to one of ordinary skill in the art, to modify a reference or to combine reference teachings. There is no suggestion or motivation to combine the teachings of the *McCue* reference with the teachings of the *Miller* reference or the *Kurtzberg* reference.

The fact that two references are concerned with the same general technical area does not without more provide a "clear and particular" motivation to combine the references. The Appellant respectfully submits that the alleged motivation to combine references has been assumed by "hindsight" in light of the existence of the Appellant's invention. There is no "clear and particular" motivation (as required by the applicable law) to combine the teachings of the *McCue* reference with the teachings of the *Miller* reference or the *Kurtzberg* reference.

Even if the *McCue* reference could somehow be combined with the *Miller* reference and the *Kurtzberg* reference, the combination would not teach, suggest, or even hint at the Appellant's invention. MPEP § 2142 indicates that a prior art reference (or references when two or more references are combined) must teach or suggest all the claim limitations of the invention. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not be based on an Appellant's disclosure. In the present case, the *McCue* reference and the *Miller* reference and the *Kurtzberg* reference in combination

would not teach or suggest all the claim limitations of the Appellant's invention.

As such, Claims 4 and 16 also are patentable over the *Miller* reference and the *Kurtzberg* reference and the *McCue* reference, whether taken singly or in combination.

G. REJECTIONS OF CLAIMS 5, 9-10 AND 17

Claims 5, 9-10 and 17 have been rejected under 35 U.S.C. §103(a) as being unpatentable for obviousness in view of the *Miller* reference and the *Kurtzberg* reference and the *Damian* reference and the *McCue* reference. For the reasons set forth below, the Appellant respectfully submits that the Examiner has not established a *prima facie* case of obviousness with respect to Claims 5, 9-10 and 17.

The Appellant hereby reiterates and incorporates by reference all of the arguments previously set forth with respect to the *Miller* reference and the *Kurtzberg* reference and the *Damian* reference and the *McCue* reference.

The Appellant respectfully traverses the Examiner's assertion that it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the combination of the *Miller* reference and the *Kurtzberg* reference with the teachings of the *Damian* reference and the *McCue* reference. Specifically, the Appellant traverses the Examiner's assertions that "It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Miller, Kurtzberg, McCue and Damian because the method taught by Damian would improve the system of Miller by using the knowledge base to

dynamically schedule tasks in the system." (February 6, 2006 Office Action, Page 7, Lines 2-6).

The Appellant respectfully submits that the *Damian* reference does not and can not supply the deficiencies of the *Miller* and *Kurtzberg* and *McCue* references with respect to the Appellant's claimed invention. The *Damian* reference is concerned with allocating production resources to orders. Therefore, the *Damian* reference does not teach a resource allocator of the types disclosed and claimed by the Appellant.

There is no specific suggestion to combine the teachings of the *Damian* reference with the teachings of the *Miller* reference or the *Kurtzberg* reference or the *McCue* reference. There must be some suggestion or motivation, either in the references themselves, or in the knowledge generally available to one of ordinary skill in the art, to modify a reference or to combine reference teachings. There is no suggestion or motivation to combine the teachings of the *Damian* reference with the teachings of the *Miller* reference or the *Kurtzberg* reference or the *McCue* reference.

The fact that two references are concerned with the same general technical area does not without more provide a "clear and particular" motivation to combine the references. The Appellant respectfully submits that the alleged motivation to combine references has been assumed by "hindsight" in light of the existence of the Appellant's invention. There is no "clear and particular" motivation (as required by the applicable law) to combine the teachings of the *Damian* reference with the teachings of the *Miller* reference or the *Kurtzberg* reference or the *McCue* reference.

Even if the *Damian* reference could somehow be combined with the *Miller* reference and the *Kurtzberg* reference and the *McCue* reference, the combination would not teach, suggest, or

even hint at the Appellant's invention. MPEP § 2142 indicates that a prior art reference (or references when two or more references are combined) must teach or suggest all the claim limitations of the invention. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not be based on an Appellant's disclosure. In the present case, the *Damian* reference and the *Miller* reference and the *Kurtzberg* reference and the *McCue* reference in combination would not teach or suggest all the claim limitations of the Appellant's invention.

As such, Claims 5, 9-10 and 17 also are patentable over the *Miller* reference and the *Kurtzberg* reference and the *Damian* reference and the *McCue* reference, whether taken singly or in combination.

The Appellant respectfully submits that the rejections of Claims 1-20 under 35 U.S.C. § 103(a) have been overcome. Therefore, the Appellant respectfully requests full allowance of Claims 1-20.

CONCLUSION

The Appellant has demonstrated that the present invention as claimed is clearly distinguishable over the prior art cited of record. Therefore, the Appellant respectfully requests the Board of Patent Appeals and Interferences to reverse the final rejection of the Examiner and instruct the Examiner to issue a notice of allowance of all claims.

The Appellant has paid the fee associated with the filing of the Appeal Brief and the fee for the three month extension of time. The Appellant does not believe that any additional fees are due. However, the Commissioner is hereby authorized to charge any additional fees (including any extension of time fees) or credit any overpayments to Munck Butrus Deposit Account No. 50-0208.

Respectfully submitted,

MUNCK BUTRUS, P.C.

Date: Dec 11, 2006

William A. Munck
Registration No. 39,308

P.O. Drawer 800889
Dallas, Texas 75380
(972) 628-3600 (main number)
(972) 628-3616 (fax)
E-mail: *wmunck@munckbutrus.com*

APPENDIX A

PENDING CLAIMS

1. (Original) A resource allocator that is operable to allocate a plurality of resources among a plurality of tasks within a process system, said plurality of resources comprising human resources and process resources, and said process system comprising a plurality of application processes, said resource allocator comprising:

a memory that stores a model of said process system, said model representing mathematically said plurality of application processes, said plurality of resources, and said plurality of tasks, and defining relationships among related ones thereof;

a status monitoring controller that monitors measurable characteristics associated with ones of said process system, said plurality of application processes, said plurality of resources, and said plurality of tasks; and

a resource allocation controller that modifies ones of said mathematical representations and that allocates ones of said plurality of resources among ones of said plurality of tasks within said process system in response to ones of said monitored measurable characteristics.

2. (Original) The resource allocator as set forth in Claim 1 further comprising a graphical user interface that is operable to enable supervisory interaction.

3. (Original) The resource allocator as set forth in Claim 2 wherein said graphical user interface is operable to facilitate at least one of customer management, network management, transaction management, resource management, communication management.

4. (Original) The resource allocator as set forth in Claim 1 wherein said memory further comprises a data repository that comprises at least one of a customer database, a network database, a transaction database, a resource database, a communication database, a knowledge database and a control database.

5. (Original) The resource allocator as set forth in Claim 4 wherein said data repository comprises at least said knowledge database, said resource allocator is further operable to modify said knowledge database in response to ones of said monitored measurable characteristics thereby enabling said resource allocator to be self-learning.

6. (Original) The resource allocator as set forth in Claim 1 wherein said resource allocation controller is operable to reselect one of said allocated ones of said plurality of resources among ones of said plurality of tasks within said process system in response to modified ones of said monitored measurable characteristics.

7. (Original) A method of operating a resource allocator to allocate a plurality of resources among a plurality of tasks within a process system, said plurality of resources comprising human resources and process resources, and said process system comprising a plurality of application processes, said method of operating said resource allocator comprising the steps of:

storing a model of said process system in memory that represents mathematically said plurality of application processes, said plurality of resources, and said plurality of tasks, and defining relationships among related ones thereof;

monitoring measurable characteristics associated with ones of said process system, said plurality of application processes, said plurality of resources, and said plurality of tasks in said memory; and

modifying ones of said mathematical representations and allocating ones of said plurality of resources among ones of said plurality of tasks within said process system in response to ones of said monitored measurable characteristics.

8. (Original) The method of operating the resource allocator as set forth in Claim 7 further comprising the step of providing a graphical user interface operable to enable supervisory interaction, to facilitate at least one of customer management, network management, transaction management, resource management, communication management.

9. (Original) The method of operating the resource allocator as set forth in Claim 7 further comprising the step of maintaining at least one of a customer database, a network database, a transaction database, a resource database, a communication database, a knowledge database and a control database in memory.

10. (Original) The method of operating the resource allocator resource allocator as set forth in Claim 9 wherein said knowledge database is maintained in memory and said method further comprises the step of modifying said knowledge database in response to ones of said monitored measurable characteristics thereby enabling said resource allocator to be self-learning.

11. (Original) The method of operating the resource allocator as set forth in Claim 7 further comprising the steps of reselecting one of said allocated ones of said plurality of resources among ones of said plurality of tasks within said process system in response to modified ones of said monitored measurable characteristics.

12. (Original) The method of operating the resource allocator as set forth in Claim 11 wherein said reselecting step further comprises the step of accessing at least a knowledge database.

13. (Original) A process system comprising:

a plurality of subsystems;

a plurality of tasks;

a plurality of resources comprising human resources and process resources; and

a resource allocator that is operable to allocate said plurality of resources among said plurality of tasks, said resource allocator comprising:

a memory that stores a model of said process system, said model representing mathematically said plurality of application processes, said plurality of resources, and said plurality of tasks, and defining relationships among related ones thereof;

a status monitoring controller that monitors measurable characteristics associated with ones of said process system, said plurality of application processes, said plurality of resources, and said plurality of tasks; and

a resource allocation controller that modifies ones of said mathematical representations and that allocates ones of said plurality of resources among ones of said plurality of tasks within said process system in response to ones of said monitored measurable characteristics.

14. (Original) The process system as set forth in Claim 13 wherein said resource allocator further comprises a graphical user interface that is operable to enable supervisory interaction.

15. (Original) The process system as set forth in Claim 14 wherein said graphical user interface is operable to facilitate at least one of customer management, network management, transaction management, resource management and communication management.

16. (Original) The process system as set forth in Claim 13 wherein said memory further comprises a data repository that comprises at least one of a customer database, a network database, a transaction database, a resource database, a communication database, a knowledge database and a control database.

17. (Original) The process system as set forth in Claim 16 wherein said data repository comprises at least said knowledge database, said resource allocator is further operable to modify said knowledge database in response to ones of said monitored measurable characteristics thereby enabling said resource allocator to be self-learning.

18. (Original) The process system as set forth in Claim 13 wherein said resource allocator is operable to reselect one of said allocated ones of said plurality of resources among ones of said plurality of tasks within said process system in response to modified ones of said monitored measurable characteristics.

19. (Original) The process system as set forth in Claim 13 wherein said process system controls one of a manufacturing plant, a refinery, a hotel, a restaurant, a traffic control system, a transportation control system and an emergency services system.

20. (Original) The process system as set forth in Claim 13 wherein said resource allocator is an information management system.

APPENDIX B

EVIDENCE APPENDIX

None

APPENDIX C

RELATED PROCEEDINGS APPENDIX

None